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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			TERMANINI, SAMIR	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/676,846	Applicant(s) ROESSLER ET AL.	
	Examiner Samir Termanini	Art Unit 2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/30/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the following communications: Application filed on 9/30/2003.
2. Claims 1-21 are pending in this case. Claims 1, 14, and 18 are in independent form.

DRAWINGS

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 425, 410, 415, 420, 500, 505, 510, 600, 605, 610, and 615.

4. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

CLAIM REJECTIONS - 35 U.S.C. §101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-13 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter, and further raises questions as to whether the claims are directed to an abstract idea. More specifically, the claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 U.S.C. 101. They are clearly not a series of steps or acts, to be a process, nor are they a combination of chemical compounds to be a composition of matter. Claims 1-13 are computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs because the "information carrier" limitation recited, in claims 1-13, is not limited to those carriers that are "computer-readable" (e.g. the claimed "storage medium" could be a piece of paper) and likewise does not define any structural and functional interrelationship between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. Therefore, claims 1-13, being directed toward computer listings *per se*, fail to fall within a statutory category.

7. For the purposes of examination, claims 1-13 are being examined as if they were directed toward subject matter claimed as embodied on a computer-readable medium.

CLAIM REJECTIONS - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-4, and 6-21 are rejected under 35 U.S.C. 102(b) as being anticipated by *Aaker et al.* (US Patent No. 5,758,087 A).

As to independent claim 1, *Aaker et al.* teach a computer program product ("computer program product 900" col. 8, lines 27-29) to: provide on a client computer a user interface for a computer program application ("a client system application program interface [API] 103" col. 3, lines 60-65), the user interface being operable to receive input from a user interacting with the client and from the input to generate user interaction events ("events" col. 1, lines 50-54); identify on the client one or more possible user interaction events ("request and response interaction technique" col. 3, lines 4-9) while the user interface is in a current user interface state, the possible user interaction events being user interaction events that would arise from input the user interface could possibly receive in the current user interface state from the user ("predicted based upon the current request" col. 3, lines 20-22); pre-process one or more of the possible user interaction events to generate one or more possible user interface states ("A predicted response is generated by the server system 200 using the predict logic module 230." col. 3, lines 22-26); and store the one or more possible user interface states for later use ("sets a trigger that will recognize a match of the client's predicted request" col. 3, lines 24-26)(emphasis added).

As to dependent claim 2, *Aaker et al.* further teach receiving an actual input from the user and, if one of the possible user interface states corresponds to a user interaction event that arises from the actual input from the user, make the corresponding one of the possible user interface states the current user interface state ("When client's predicted request arrives, the trigger sends the response using the transmit data function 236. " col. 3, lines 26-28).

As to dependent claim 3, *Aaker et al.* teach storing the one or more possible user interface appearances for later use ("transfer predictions are prepared for the identified embedded files as indicated at a block 636" col. 6, lines 60-65).

As to dependent claim 4, *Aaker et al.* teach pre-rendering one or more of the possible user interface states comprise instructions to generate code to render the corresponding user interface states ("sequential steps for preparing a predicted response, such as, for imbedded hypertext files begin with preparing a file transfer prediction for a current document as indicated at a block 630" col. 6, lines 54-57).

As to dependent claim 6, *Aaker et al.* teach receive an actual input from the user and, if one of the possible user interface states corresponds to a user interaction event that arises from the actual input from the user, making the corresponding one of the possible user interface appearances a user interface appearance of the current user interface state ("When a client's predicted request arrives, the trigger sends the response" col. 1, lines 46-50).

As to dependent claim 7, *Aaker et al.* teach specifying an order for pre-processing possible user interaction events ("The task priority count is maintained so that the tasks

with a high priority count can be prioritized above other tasks with lower counts for task scheduling..." col. 7, lines 12-15).

As to dependent claim 8, *Aaker et al.* teach specifying an order for any pre-processing of possible user interaction events comprise instructions by: estimating the likelihood of the one or more possible user interaction events ("...whether it is possible to predict..." col. 5, lines 64-66) based on an estimate of the likelihood of different inputs the user interface could possibly receive in the current user interface state from the user ("data and trigger set function 234 of FIGS. 1 and 2B " col. 5, lines 58-61).

As to dependent claim 9, *Aaker et al.* teach the user interface comprises a control having instructions to establish estimates of the likelihoods of generating possible user interaction events from user interaction with the control ("Predict logic module 230 includes a compare function 232" col. 2, lines 65-67); and the instructions to estimate the likelihood of the one or more possible user interaction events comprise instructions using the estimates established by the control ("it is determined whether it is possible to predict a next request as indicated at a decision block 604." col. 5, lines 64-66).

As to dependent claim 10, *Aaker et al.* teach detecting a period of inactivity ("The timeout action is provided so that if a predicted request is not received within the timeout interval or other events occur before a predicted request arrives..." col. 5, lines 40-44); and beginning executing the instructions to identify and pre-process only after a period of inactivity ("timer logic function 238 for implementing a timeout action associated with a triggered response." col. 2 line 65 to col. 3 line 3).

As to dependent claim 11, *Aaker et al.* teach instructions to pre-process one or more of the possible user interaction events to generate one or more possible user interface states

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comprise instructions to obtain data from the application for possible user interface states ("transmit data function 236" col. 5, lines 34-37).

As to dependent claim 12, *Aaker et al.* teach instructions to identify on the client one or more possible user interaction events comprise instructions to include as possible user interaction events only those possible user interaction events having an estimated likelihood of occurrence exceeding a threshold ("Tasks with a high prediction count can be prioritized above other tasks that have been less successfully predicted." col. 1, lines 60-61).

As to dependent claim 13, *Aaker et al.* teach that the computer program application is a program running on a server computer in data communication with the client computer ("packets between the client system 100 and server system 200 " col. 3, lines 56-59); and the instructions to provide a user interface on the client computer comprise instructions to provide the user interface in a Web browser ("Server system 200 further includes the compare function 232, compare data and trigger set function 234, and transmit data function 236 between the internet protocol module 209 and the media access protocol module 208, and a predict logic interface 230A, as shown in FIG. 2B." col. 5, lines 21-25).

As to independent claim 14, *Aaker et al.* teach a computer implemented method, comprising: providing on the client computer a user interface for a computer program application ("a client system application program interface [API] 103" col. 3, lines 60-65), the user interface being operable to receive input from a user interacting with the client and from the input to generate user interaction events ("events" col. 1, lines 50-54); identifying on the client one or more possible user interaction events ("request and response interaction technique" col. 3, lines 4-9) while the user interface is in a current user interface state, the possible user interaction events being user interaction events that would arise

from input the user interface could possibly receive in the current user interface state from the user ("predicted based upon the current request" col. 3, lines 20-22); pre-processing one or more of the possible user interaction events to generate one or more possible user interface states("A predicted response is generated by the server system 200 using the predict logic module 230." col. 3, lines 22-26); and storing the one or more possible user interface states for later use ("sets a trigger that will recognize a match of the client's predicted request" col. 3, lines 24-26)(emphasis added).

As to dependent claim 15, *Aaker et al.* teach receiving an actual input from the user and, if one of the possible user interface states corresponds to a user interaction event that arises from the actual input from the user, make the corresponding one of the possible user interface states the current user interface state ("When client's predicted request arrives, the trigger sends the response using the transmit data function 236. " col. 3, lines 26-28).

As to dependent claim 16, *Aaker et al.* teach pre-rendering one or more of the possible user interface states to generate one or more possible user interface appearances ("sequential steps for preparing a predicted response, such as, for imbedded hypertext files begin with preparing a file transfer prediction for a current document as indicated at a block 630" col. 6, lines 54-57); and storing the one or more possible user interface appearances for later use ("sets a trigger that will recognize a match of the client's predicted request" col. 3, lines 24-26)(emphasis added).

As to dependent claim 17, *Aaker et al.* teach specifying an order for pre-processing the possible user interaction events ("The task priority count is maintained so that the tasks with a high priority count can be prioritized above other tasks with lower counts for task scheduling..." col. 7, lines 12-15).

As to independent claim 18, *Aaker et al.* teach an apparatus, comprising: a client computer (see "client system 100," Fig. 1) implementing a user interface for a computer program application ("a client system application program interface [API] 103" col. 3, lines 60-65), the user interface being operable to receive input from a user interacting with the client and from the input to generate user interaction events ("events" col. 1, lines 50-54); means for identifying one or more possible user interaction events ("request and response interaction technique" col. 3, lines 4-9) while the user interface is in a current user interface state, the possible user interaction events being user interaction events that would arise from input the user interface could possibly receive in the current user interface state from the user ("predicted based upon the current request" col. 3, lines 20-22); means for pre-processing one or more of the possible user interaction events to generate one or more possible user interface states ("A predicted response is generated by the server system 200 using the predict logic module 230." col. 3, lines 22-26); and means for storing the one or more possible user interface states for later use ("sets a trigger that will recognize a match of the client's predicted request" col. 3, lines 24-26)(emphasis added).

As to dependent claim 19, *Aaker et al.* teach a means for receiving an actual input from the user and, if one of the possible user interface states corresponds to a user interaction event that arises from the actual input from the user, make the corresponding one of the possible user interface states the current user interface state ("When client's predicted request arrives, the trigger sends the response using the transmit data function 236." col. 3, lines 26-28).

As to dependent claim 20, *Aaker et al.* teach a means for pre-rendering one or more of the possible user interface states to generate one or more possible user interface

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appearances ("sequential steps for preparing a predicted response, such as, for imbedded hypertext files begin with preparing a file transfer prediction for a current document as indicated at a block 630" col. 6, lines 54-57); and means for storing the one or more possible user interface appearances for later use ("transfer predictions are prepared for the identified embedded files as indicated at a block 636" col. 6, lines 60-65).

As to dependent claim 21, *Aaker et al.* teach a means for specifying an order for pre-processing the possible user interaction events ("The task priority count is maintained so that the tasks with a high priority count can be prioritized above other tasks with lower counts for task scheduling..." col. 7, lines 12-15).

CLAIM REJECTIONS - 35 U.S.C. § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Aaker et al.* (US Patent No. 5,758,087 A) in view of *Horikiri et al.* (US Patent No. 5,765,154).

As to dependent claim 5, *Aaker et al.* discloses the limitations of claim 4, addressed above, further comprising: "imbedded hypertext files... for a current [state]." col. 6, lines 54-57). However, *Aaker et al.* fails to disclose that the imbedded hypertext files are HTML (Hypertext Markup Language). *Horikiri et al.* explicitly discloses that it well known that hypertext files are HTML files ("hypertext documents represented by grammar which is

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well-known as HTML (Hyper Text Markup Language)," col. 11, lines 22-26). It would have been obvious to make use of HTML to code the hypertext file of *Aaker et al.* in view of the express suggestion to do so in *Horikiri et al.*

CONCLUSION

12. Although not relied upon, the following prior art is made of record because it considered pertinent to applicant's disclosure:

- [1] *Barrett et al.* (US Patent No. 5,727,129) for teaching a system that tracks a user's past history of websites visited, including the frequency and dates and times of visits, in order to predict what web information is likely to be accessed by the user in the future.
- [2] *Smith et al.* (US Patent No. 6,742,033 B1) for teaching a that network delivered/content can be sped up to pre-cache internet content where pre-caching internet content may mean downloading information from the internet that the system predicts that the user will request in the future.
- [3] *Aaker et al.* (US Patent No. 5,758,087 A) for teaching a computer, e.g. a server or computer operated by a network provider sends one or more requesting computers (clients) a most likely predicted-to-be selected (predicted) page of information by determining a preference factor for this page based on one or more pages that are requested by the client.
- [4] *Mogul* (US Patent No. 5,802,292 A) for teaching a method for predictive pre-fetching of objects over a computer network.
- [5] *O'Brien et al.* (US Patent No. 6,055,569 A) for teaching a browser working in conjunction with a HTTP server that selectively downloads WWW pages into the browser's memory cache by evaluating the weight to a predetermined browser criteria so only those pages most probably to be downloaded are stored in the browser's memory cache.
- [6] *Horvitz* (US Patent No. 6,067,565 A) for teaching a technique for pre-fetching a web page of potential future interest in lieu of continuing a current information download.

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- [7] *Horvitz* (US Patent No. 6,085,226 A) for teaching a method and apparatus for utility-directed prefetching of web pages into local cache using continual computation and user models.
- [8] *Altschuler et al.* (US Patent No. 6,154,767 A) for teaching building a resource (such as Internet content for example) and attribute transition probability models and using such models to predict future resource and attribute transitions.

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samir Termanini whose telephone number is (571) 270-1047. The Examiner can normally be reached from 9 A.M. to 4 P.M., Monday through Friday (excluding alternating Fridays).

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, *see* <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

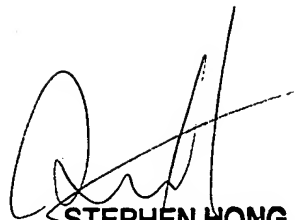
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